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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS
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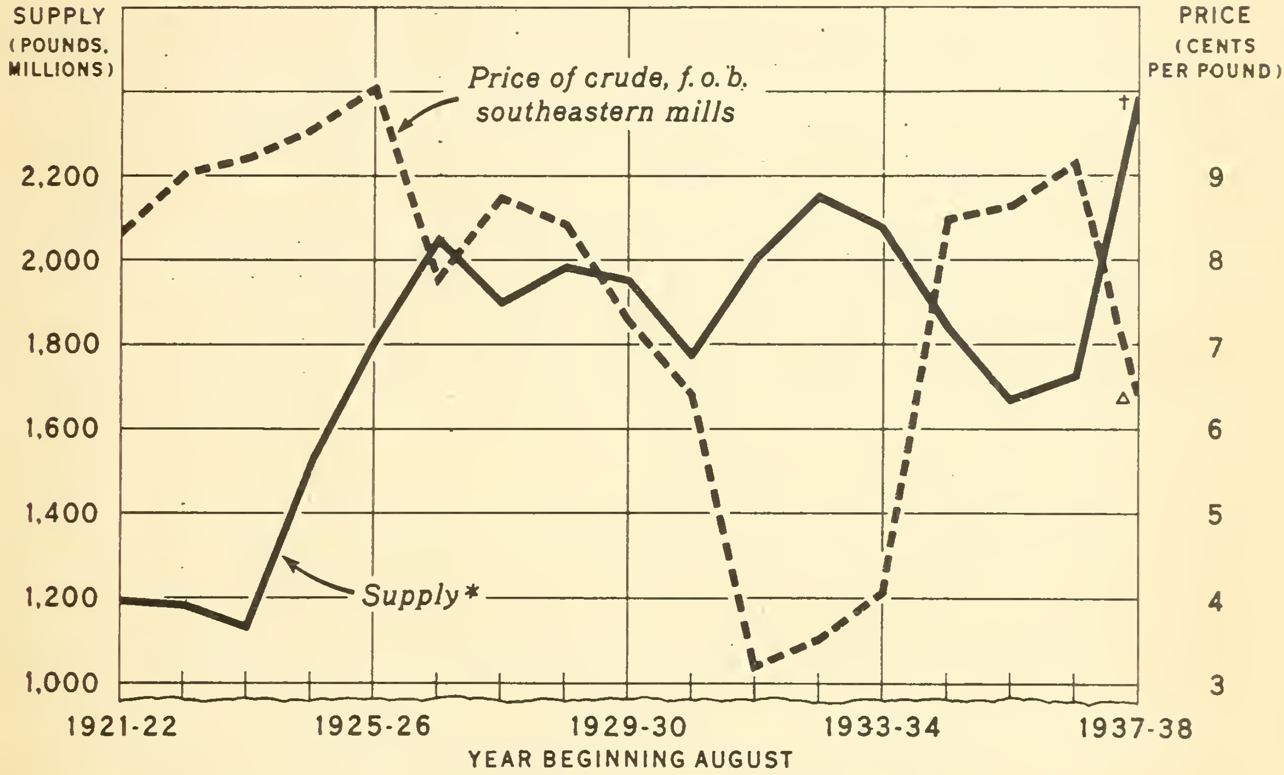
THE FATS AND OILS SITUATION

COTTONSEED OIL, CRUDE: SUPPLY AND PRICE, UNITED STATES, 1921-37



*STOCKS ON AUGUST 1, PLUS PRODUCTION AUGUST 1-JULY 30
△AVERAGE FOR 4 MONTHS, AUGUST-NOVEMBER 1937
†PRELIMINARY ESTIMATE ON NOVEMBER 10, 1937

U. S. DEPARTMENT OF AGRICULTURE NEG. 32917 BUREAU OF AGRICULTURAL ECONOMICS

THE BULK OF THE COTTONSEED CROP WILL BE CRUSHED EVEN THOUGH THE PRICE OF COTTONSEED OIL IS VERY LOW - THAT IS, THE SIZE OF THE COTTON CROP IS THE MOST IMPORTANT FACTOR DETERMINING THE SUPPLY OF COTTONSEED OIL. CONVERSELY THE PRICE OF COTTONSEED OIL IS AFFECTED NOT ONLY BY SUPPLIES OF COTTONSEED OIL BUT BY SUPPLIES AND PRICES OF LARD AND COMPETING VEGETABLE OILS.

Table 1.- Price per pound of selected fats and oils, October-November, 1936-37

Fat or oil	1936		1937	
	Oct.	Nov.	Oct.	Nov.
Domestic prices -	Cents	Cents	Cents	Cents
Butter, 92°, N. Y.	32.9	33.6	36.0	38.1
Oleomargarine, domestic vegetable, Chicago	15.5	15.5	15.0	15.0
Lard, prime steam, Chicago	11.5	11.8	10.0	9.5
Lard, refined, Chicago	12.4	12.7	12.0	11.4
Lard compounds, Chicago	12.5	12.6	10.2	10.4
Coconut oil, edible, N. Y.	8.7	9.1	7.0	6.2
Cottonseed oil, crude, f.o.b. S.E. mills	8.6n	8.7	6.1n	6.0
Cottonseed oil, p.s.y., N. Y.	9.9	10.0	6.7	
Soybean oil, refined, N. Y.	10.1	10.2	9.0	8.8
Peanut oil, domestic, refined, N. Y.	12.5n	12.5n	10.5n	10.3n
Rape oil, refined, N. Y.	9.4	10.0	12.7	12.3
Oleo oil, No. 1, N. Y.	11.5	11.1	13.0	12.8
Oleostearine, barrels, N. Y.	9.8	9.3	9.4	9.1
Corn oil, refined, N. Y.	12.6	12.5	10.1	9.8
Olive oil, edible, N. Y.	25.1n	24.0n	32.0n	31.9n
Sunflower oil, refined, N. Y.	11.2	11.1	-	-
Teaseed oil, crude, N. Y.	12.2	11.8	9.4	9.3
Coconut oil, crude, Pacific Coast	6.2	6.4	4.4	4.0
Tallow, inedible, Chicago	6.5	7.2	5.7	5.4
Grease, house, N. Y.	6.5	7.2	5.7	5.1
Palm oil, crude, N. Y.	4.9	5.2	4.5n	4.2
Olive oil foots, barrels, N. Y.	9.3	9.3	10.6	10.1
Palm-kernel oil, denatured, N. Y.	5.4	5.6	5.0n	4.7n
Babassu oil, tanks, N. Y. 1/	9.0	9.4	7.3	7.4
Sardine oil, tanks, Pacific Coast	4.6	4.9	4.7n	4.8
Linseed oil, raw, Minneapolis	9.7	9.2	10.4	10.2
Tung oil, drums, Atlantic Coast	13.5	13.0	21.8n	15.6n
Perilla oil, drums, N. Y.	9.8	9.7	13.9	12.8
Soybean oil, crude, f.o.b. mills	8.0	8.0	5.8	5.6
Menhaden oil, crude, f.o.b. Baltimore	3.7	4.4n	4.7n	4.6n
Hempseed oil, crude, N. Y.	9.6	9.6	-	-
Foreign prices - 2/				
Cotton oil, crude, naked, Hull	5.7	5.9	4.9	3/4.5
Copra, Resecada, Philippines	3.2	3.3	3/2.0	
Palm-kernel oil, crude, Hull	5.5-	6.0	5.3	3/4.9
Whale oil, crude, No. 1, Rotterdam	4.2	4.2	4.2	3/4.2
Tallow, beef, fair-fine, London	5.6	5.7	5.3	3/5.1
Linseed oil, naked, Hull	5.4	5.5	6.8	3/6.4

1/ Beginning February 1937, prices are futures. 2/ Converted to U. S. cents per pound at current monthly rates of exchange. 3/ Prel.-Average of 3 weeks.

THE FATS AND OILS SITUATION

No material changes have taken place in the domestic vegetable fats and oils situation during the past month except the indicated increase in the cottonseed crop. This issue, however, summarizes the latest production and supply information relative to a number of the major oilseeds and animal fats.

Particular effort has been made in this issue to bring together a series of tables presenting basic information on cottonseed and cottonseed oil. This material is contained on pages 6 to 19.

Cottonseed

The December 8 report of the Crop Reporting Board raises the estimate of cotton production by 500 thousand bales, putting the figure at 18,746,000 bales of 478 pounds net, or about 18,400,000 running bales after allowing for the "city crop."

Since cottonseed is a by-product of the cotton crop, world cotton production constitutes a fairly reliable indication of potential cottonseed oil supplies. World production of cotton for the 1937-38 season is expected to be about 38,500,000 bales. This is 25 percent larger than the record world production of the previous season and one-third larger than the average for the 5 years 1928-29 to 1932-33. (See pages 6 to 19.)

Flaxseed

Production of flaxseed from the 1937 crop is still estimated at 7,634 thousand bushels compared with 5,908 thousand in 1936 and 14,520 thousand bushels in 1935. A later estimate will be released December 17. Crushings for the first quarter of the 1937-38 crushing season amounted to 7,666 thousand bushels, which was slightly more than the equivalent of total domestic production from the 1937 crop. This is a larger crushing than has occurred in the same quarter of any year since 1929, although only very slightly larger than crushings in 1931. Consumption of linseed oil during the July-September quarter has kept pace with production, and stocks have remained unchanged; thus the upward trend in consumption of linseed oil noted in the first half of the calendar year 1937 continued into the first quarter of the new crop season. Consumption in the first 9 months of 1937 amounted to 489 million pounds compared with 371 million in the same period last year.

Imports of flaxseed are materially above last year. The January to September 1937 total was 22.8 million bushels compared with 9.4 million bushels in the first 9 months of 1936.

Argentine flaxseed acreage is now estimated at 7,023 thousand acres. This is 4 percent lower than the October estimate. Reports indicate that a certain amount of this acreage will be abandoned, and that unfavorable weather conditions introduce an additional element of uncertainty in respect to ultimate yields. Final estimate for the harvest a year ago was 6,622 thousand acres.

Production in India (harvest period, January to April) was 16,720 thousand bushels in 1937 compared with 15,520 thousand bushels in 1936. Sowing for harvest during the spring of 1938 is in progress, and early reports indicate that a full acreage is expected to be seeded. Acreage in the U.S.S.R. has not materially changed in 1937 compared with 1936. The total acreage in European countries in 1937 was considerably larger than in 1936. Germany particularly has increased production. This expansion of acreage is in line with a tendency in several countries to develop a greater independence of foreign sources of fats and oils.

Other vegetable oils

Revised estimates of the United States soybean and peanut crops will be available December 17.

The latest estimate of the Manchurian soybean crop, released November 1, shows a marked reduction from the first estimate, and now stands at 153,073 thousand bushels, compared with 152,375 thousand bushels in 1936.

Manchurian perilla seed harvest is estimated at 15 percent lower than last year.

Reports from the Philippines indicate continuing plentiful supplies of copra and coconut oil.

Beef fats

As to prospective supplies of beef fats (tallow, oleo oil, and oleostearine), total slaughter both of cattle and calves in 1938 is expected to be smaller than in 1937, with most of the decrease occurring in the first half of the year. The average weights of cattle slaughtered in 1938, however, will be considerably higher than in 1937, and this increase in weight will partially offset the decrease in numbers slaughtered. Total beef fat supplies for consumption next year, therefore, probably will be nearly as large as in 1937, according to the November 19 "Beef Cattle Situation".

Production of inedible tallow January - September 1937 is estimated to be 467 million pounds, or 50 million pounds above production during the first three quarters of 1936. However, production of edible tallow, oleo oil, and oleostearine in the same period decreased about 30 million pounds, thus making a net increase of only about 20 million pounds in production of beef fats in the first 9 months of 1937 compared with 1936.

Lard

Hog slaughter in 1938 probably will be considerably larger than in 1937, according to the Bureau of Agricultural Economics outlook report on meat animals, issued in November. Production of lard under Federal inspection for the marketing season October 1936 through September 1937 was about 4 percent below production in the same months of 1935-36 and was only 51 percent of average production in the 5 marketing seasons from 1928-29 to 1932-33. Consumption and exports of lard for the marketing season 1936-37 were 6 percent more than for the same period in 1935-36, but were only 53 percent of the average 1928-29 to 1932-33.

Germany was formerly second only to Great Britain as an export outlet for American lard. Total exports of lard from the United States to Germany averaged 141 million pounds in 1931-32 and 1932-33. In 1933-34 they dropped to 58.5 million pounds. In 1934-35 and 1935-36 they averaged 4.5 million pounds, and declined to less than 2 million pounds in 1936-37, partly because of the reduced production of hogs in this country following the droughts.

On November 1, 1936, the beginning of the storage season, stocks of lard amounted to 95 million pounds, compared with a 70-million pound average on November 1, 1930 to 1934. By March 1, 1937, stocks of lard were almost double the 5-year average on that date. The marked reduction in slaughter supplies of hogs from May through August 1937, and the slight increases in consumption and exports of lard throughout the marketing season 1936-37, were accompanied by material decreases in stocks of lard, and by November 1, 1937, they had dropped to 39 million pounds.

Marine mammal oils

As noted in the August 1937 issue of the Fats and Oils Situation, whale oil rendered on a floating whale oil factory of American registry has been considered "domestic production" and permitted entry free of duty. At the present time an issue is being made regarding the entry of whale oil produced on the Ulysses, a floating rendering plant which was formerly a tanker under American registry, and was, according to the American Consul at Goetborg, converted into a whaler in a Swedish port, and has engaged in whaling operations under the American flag in Australian waters during the past season. The Ulysses is said to have sent her cargo to the United States on a Norwegian vessel and has gone to the Antartic for the December-March whaling season.

The cargo of 28 million pounds has been seized by the Department of Commerce on the charge that one section of the Maritime Act of 1920 has not been complied with. Extended litigation will doubtless ensue. In the meantime the Bureau of Fisheries has included this cargo in the report of domestic production of whale oil in 1937, bringing the total up to 53 million pounds in the first 9 months of 1937, compared with the largest previous reported production of 31 million pounds in 1936. It is also reported that another American whaler is about to arrive from the Indian ocean with a large cargo of whale oil. Twenty-six million pounds were reported as having been produced in the calendar year 1920, while the 15-year average production 1921-35 was only 9 million pounds.

Imports for consumption of marine mammal oil for the first 9 months of 1937 have totaled 53 million pounds compared with 18 million for the same period of 1936. Stocks have piled up, and on September 30, 1937, amounted to 100 million pounds. In 1931, after the enormous world production of marine mammal oils in the 1930-31 season, when burdensome stocks of whale oil piled up throughout the world, stocks in the United States amounted to 130 million pounds. The present stocks are larger by one-third than total consumption ever estimated in any one year. Estimated total disappearance of whale oil in the United States reached a high mark of 74 million pounds in the calendar year 1929, declined steadily for 6 years, was 33 million pounds in 1935, and 35 million pounds in 1936.

It is reported that in Europe the year will close with practically no unsold surplus of whale oil.

Prices

Prices of oils and fats have continued a downward trend, but without sharp decreases. Lard prices as well as prices of vegetable oils competing with cottonseed oil have been adversely affected by the prospective large production of cottonseed oil, and prices for the last week in November were definitely lower than the November average, which in turn was lower than October 1937 and lower than November 1936. (See table 1.)

Imported as well as domestic oils are lower in price, except that tung oil nominally quoted at 21.8 cents per pound in October carried a nominal price of 15.6 cents in November. Stocks of tung oil on September 30, 1937, were reported at 59 million pounds, compared with 45 million pounds on the comparable date a year ago.

Butter prices are an exception to the general rule, 92 score at New York averaging 38.1 cents for November compared with 36.0 cents in October 1937 and 33.6 cents in November of 1936.

Reports from commercial firms in London, November 15, state that "prices of most oilseeds and fats have now reached the lowest average level of the year", and that "there is no dearth of oils and fats in Europe but consumers are unhampered with heavy stocks at high prices as they were in the slump of 1931-32." The present situation also is reported as much healthier than it was 6 years ago and "although the average level of prices over the next year is likely to be below the average for the present year, we must be prepared for sharp upward movements."

COTTONSEED AND COTTONSEED OIL

In view of the largest production of cottonseed ever known in this country the potential production of cottonseed oil is also greater than production in any preceding year. This potential production plus large stocks of crude cottonseed oil at the beginning of the season indicates a supply of crude cottonseed oil available for utilization during the crop season August 1937 through July 1938 larger than ever before available.

Computed on a basis of 888 pounds of seed per each 478-pound bale of cotton, including stocks of cottonseed on hand August 1, 1937, the supply of cottonseed is now estimated at 8,362 thousand tons. (See table 2.) Various estimates have been made as to the percentage of the cottonseed supply that will be crushed.

Table 2.- Cottonseed and cottonseed oil: Supply in the United States, 1921-22 to 1937-38

Year beginning Aug. 1	Cottonseed			Cottonseed oil					
	Production	Stocks, Aug. 1	Supply 1/	Crude production	Stocks, August 1				Supply of crude 1/
					Refined	Refined, in terms of crude	Crude	Total 2/	
	1,000 tons	1,000 tons	1,000 tons	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1921-22	3,528	100	3,628	930	228	245	19	264	1,195
1922-23	4,330	13	4,343	1,003	164	176	7	183	1,186
1923-24	4,503	13	4,516	980	138	149	5	154	1,133
1924-25	6,050	22	6,072	1,404	107	115	4	119	1,523
1925-26	7,150	32	7,182	1,617	174	187	5	191	1,808
1926-27	7,989	23	8,012	1,888	146	157	8	165	2,053
1927-28	5,758	90	5,848	1,477	379	407	16	423	1,900
1928-29	6,435	22	6,457	1,604	336	361	20	382	1,986
1929-30	6,590	42	6,632	1,572	339	364	19	383	1,956
1930-31	6,191	45	6,236	1,442	302	324	8	332	1,774
1931-32	7,604	25	7,629	1,694	278	299	8	307	2,001
1932-33	5,784	300	6,084	1,446	628	676	30	705	2,151
1933-34	5,306	221	6,027	1,303	676	727	51	779	2,081
1934-35	4,282	223	4,505	1,109	657	706	34	741	1,849
1935-36	4,729	90	4,819	1,163	445	478	28	507	1,670
1936-37	5,511	22	5,533	1,364	319	343	19	362	1,726
1937-38	3/(8,320)	42	(8,362)		441	474	11	485	

1/ Production and stocks on August 1.

2/ Stocks have been rounded to million pounds without adjustment to totals.

3/ Computed on basis of 888 pounds of seed per bale of cotton, from a cotton crop estimated Dec. 8, 1937 at 18,746 million bales.

Compiled from Bureau of the Census, "Cotton Production and Distribution", annual, and monthly cards, except production of cottonseed, which is from Bureau of Agricultural Economics.

Table 3.- Disposition of cottonseed, crop years, 1920-21 to 1936-37

Year beginning Aug. 1	Production	Retained on farms			Delivered to oil mills				Crushings	
		Used for seed following year	Fed or used for fertilizer	Total	Exchanged for meal	Sold or for sale	Total	As percentage of production	Total	As percentage of production
	1,000 ton	1000 ton	1000 ton	1,000 ton	1,000 ton	1000 ton	1000 ton	Percent	1000 ton	Percent
1920-21	5,966	466	1,400	1,866	509	3,591	4,100	68.7	4,069	68.2
1921-22	3,528	500	133	633	336	2,559	2,895	82.1	3,008	85.3
1922-23	4,330	568	545	1,113	310	2,907	3,217	74.3	3,242	74.9
1923-24	4,503	619	606	1,225	259	3,019	3,278	72.8	3,308	73.5
1924-25	6,050	700	763	1,463	294	4,293	4,587	75.8	4,605	76.1
1925-26	7,150	703	932	1,635	351	5,164	5,515	77.1	5,558	77.7
1926-27	7,989	604	1,021	1,625	412	5,952	6,364	79.7	6,306	78.9
1927-28	5,758	677	495	1,172	322	4,264	4,586	79.6	4,654	80.8
1928-29	6,435	684	667	1,351	329	4,755	5,084	79.0	5,061	78.6
1929-30	6,590	670	898	1,563	317	4,705	5,022	76.2	5,016	76.1
1930-31	6,191	607	890	1,497	490	4,204	4,694	75.8	4,715	76.2
1931-32	7,604	572	1,412	1,984	859	4,761	5,620	73.9	5,328	70.1
1932-33	5,734	622	619	1,241	596	3,947	4,543	78.5	4,621	79.9
1933-34	5,806	432	1,215	1,647	385	3,774	4,159	71.6	4,157	71.6
1934-35	4,282	437	427	864	208	3,210	3,418	79.8	3,550	82.9
1935-36	4,729	481	498	979	316	3,434	3,750	79.3	3,818	80.7
1936-37	5,511	534	461	995	291	4,225	4,516	81.9	4,498	81.6
1937-38	(8,320)									

1/ See U.S.D.A. Stat. Bull. No. 59, p. 34, for crushings by months.

Production, retained on farms, and deliveries are from mimeographed report of the Bureau of Agricultural Economics, "Disposition of Cottonseed, Crop Years, 1909-1936", October 29, 1937. Crushings from Bureau of Census. Percentages computed.

Production of cottonseed is based on lint produced assuming 65 pounds of seed for each 35 pounds of lint. Cottonseed for planting computed on basis of 32 pounds per acre. Oil mill deliveries as reported by Census are adjusted for imports. (This figure, adjusted for changes in stocks, is same as reported crushings.)

The difference between production and seed deliveries is accepted as amount retained on farms, and difference between amount retained on farms and that used for seed is assumed to have been fed to livestock or used for fertilizer. The difference between deliveries to oil mills and amount reported sold is assumed to have been exchanged for cottonseed meal.

Table 3 shows the calculated disposition of cottonseed for the crop years 1920-21 to 1936-37. The 1938 United States acreage goal under the agricultural conservation program has been set at about 28 million acres. On the basis of 1 bushel of 32 pounds of cottonseed per acre for planting, seed requirements for 28 million acres to be met from this season's production, would be about 448,000 tons, compared with an average of 500,000 tons used for planting the past 5 years. Other cottonseed, not delivered to oil mills, is fed to livestock or used for fertilizer on farms. The amount estimated to have been so used from the three largest cottonseed crops in the last 15 years (1925, 1926, and 1931) averaged 1,122,000 tons. If 1,640,000 tons of the crop of 1937 were used for planting, for feeding and for fertilizer, there still would remain 6,680,000 tons of cottonseed to be delivered to oil mills, which might produce about 2 billion pounds of cottonseed oil, still leaving a normal carry-over of cottonseed at the end of the season.

Another basis for estimating crushings is to consider crushings in recent years as a percentage of production. During the 10 years 1927-36, crushings during the season averaged 77.85 percent of production. This percentage applied to an estimated production of 8,320,000 tons this season would be 6,477,000 tons of seed which might produce approximately 1,940,000,000 pounds of cottonseed oil. The above average, however, is affected materially by the abnormal year 1931. In 1931, the second largest production of cottonseed on record was accompanied by lower cottonseed oil prices than in any other season in the past 30 years, the average for the cotton season being 3.19 cents per pound. Crushings amounted to only 70.1 percent of production. Consumption in 1931-32 was very low due to the depression, therefore, burdensome stocks piled up steadily throughout the year.

Table 4.-Factory consumption of cottonseed oil in specified products, and computed total disappearance of crude cottonseed oil, 1931-36

Year	Reported factory consumption of cottonseed oil							Computed disappearance of crude cottonseed oil
	Compounds and vegetable shortenings	Oleomargarine	Other edible products	Miscellaneous 1/	Soap		Total	
					Cottonseed oil	Cottonseed oil foots 2/		
	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.
1931	928	16	84	2	2	108	1,141	1,315
1932	834	15	100	2	4	129	1,084	1,240
1933	853	18	122	3	7	113	1,115	1,296
1934	1,059	55	155	3	3	102	1,377	1,566
1935	986	100	139	4	2	104	1,334	1,430
1936	919	108	178	2	1	94	1,303	1,340
1937- Jan.-Oct.		132						

1/ Includes unspecified uses and reported quantities ranging from 23 thousand to 69 thousand pounds annually in paint, varnish, and printing inks.

2/ This is the quantity reported as "loss including foots." Foots presumably all go into soap. "Loss," if known, should be subtracted from this figure.

Compiled from Bureau of the Census, Factory Consumption of Primary Animal & Vegetable Fats and Oils, by Classes of Products, except disappearance, which is computed by the Bureau of Agricultural Economics, on production, trade, and changes in stocks. Consumption of oleomargarine for period January-October 1937 is from reports of the Commissioner of Internal Revenue.

Items have been rounded to millions without adjustment to totals.

The apparent disappearance of refined cottonseed oil is estimated at 497 million pounds for August - October of the current season when prices of crude oil at the mill averaged 6.45 cents per pound, compared with a consumption of only 329 million pounds in the corresponding months a year ago when prices averaged 8.78 cents per pound. Average prices of crude oil August-October 1934 were 6.46 cents per pound or almost identical with prices in 1937. Disappearance in the 2 years corresponded fairly closely, 1934 being only 18 million pounds under 1937 for the 3 months August-October. A part of the increased consumption in 1937 was utilized by the oleomargarine industry, which consumed 26 million pounds more in August-October 1937 than in the same months of 1936. In the depression year 1931-32 prices and consumption were both very low. Prices of crude oil at mills averaged 3.57 cents per pound August-October and consumption was about 232 million pounds.

Table 5.- Average value of products from a ton of cottonseed, farm price of cottonseed, and spread, 1927-28 to 1937-38

Year beginning Aug. 1	Value of products 1/					Cottonseed: United States farm price per ton 3/	Spread
	Oil	Meal	Hulls	Linters 2/	Total		
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1927-28	27.74	20.40	3.03	5.38	56.55	35.94	20.61
1928-29	26.75	18.34	3.41	5.47	53.97	35.26	18.71
1929-30	22.82	16.25	2.77	3.92	45.76	30.43	15.33
1930-31	19.61	12.21	2.60	2.07	36.49	21.93	14.56
1931-32	10.14	6.18	1.82	1.34	19.48	9.52	9.96
1932-33	10.99	7.16	2.04	1.50	21.69	10.35	11.34
1933-34	12.74	9.87	3.09	4.47	30.17	14.21	15.96
1934-35	26.46	14.70	3.47	6.27	50.90	34.79	16.11
1935-36	26.32	10.21	2.56	5.60	44.69	31.19	13.50
1936-37	27.72	15.50	3.25	5.33	51.80	5/ 33.27	18.53
1937-38 4/							
Aug.	22.00	11.75	2.70	4.03	40.48	5/ 26.59	13.89
Sept.	19.41	9.66	2.00	3.21	34.28	5/ 19.25	15.03
Oct.	19.03	9.95	1.47	2.81	33.26	5/ 18.29	14.97
Nov.	18.66	10.43	1.72	2.64	33.45	5/ 18.76	14.69

1/ Using average annual yield of products from a ton of cottonseed as reported by the Bureau of the Census, crude oil prices, f.o.b. Southeast mills, meal prices (41 percent protein) Memphis, hull prices, Atlanta, and linters, f.o.b. mill points.

2/ Assuming annual production contained 33 pounds of U.S. Grade No. 2 linters and the remainder U.S. Grade No. 6 linters.

3/ Weighted average price, weighted geographically by production, seasonally by ginnings.

4/ Assuming yield of 312 pounds crude oil, 907 pounds meal and cake, 540 pounds hulls, and 120 pounds linters (U.S. average yield 1931-36).

5/ Preliminary.

The value of cottonseed is determined largely by the value of the products of the crushing operation, and average prices received by producers for cottonseed are related fairly closely to average prices of cottonseed products combined. (See table 6.) It will be noted in figure 1 that the United States farm price of cottonseed moved in the same direction as the value of the crude oil content and the total value of all four primary products in each year of the 9-year period 1927-28 to 1936-37. The value of the meal or cake content shows the same uniform tendency (see table 5.) So far in the current (1937-38) season, the value of each of the products is below the 3-year average 1934-35 to 1936-37, but the total value of all products remains above the levels of 1931-32 to 1933-1934, as does the average farm price.

Table 6.- Cottonseed and cottonseed products: Prices at specified locations, 1927-28 to 1937-38

Year beginning Aug. 1	Cottonseed: United States farm price per ton 1/	Cottonseed oil, crude f.o.b. S.E. mills per pound	Cottonseed meal, 41% protein, Memphis, per ton	Cottonseed hulls, Atlanta, per ton	Linters, f.o.b. mill points, per pound: No. 2	Linters, f.o.b. mill points, per pound: No. 6
	Dollars	Cents	Dollars	Dollars	Cents	Cents
1927-28	35.94	8.75	45.34	10.69	2/ 7.83	2/ 3.68
1928-29	35.26	8.44	40.66	12.60	2/ 6.40	2/ 3.57
1929-30	30.43	7.29	36.52	10.03	2/ 4.53	2/ 2.66
1930-31	21.93	6.41	26.61	9.39	3.58	1.24
1931-32	9.52	3.19	13.71	6.43	2.55	.74
1932-33	10.35	3.51	15.80	7.17	2.48	1.03
1933-34	14.21	4.07	21.71	11.62	5.13	3.27
1934-35	34.79	8.48	32.31	13.52	5.75	4.05
1935-36	31.19	8.63	22.41	9.38	5.49	3.44
1936-37 3/	33.27	9.15	34.33	12.74	5.00	3.12
1937-38 3/						
Aug.	26.59	7.05n	25.90	10.00	4.62	2.88
Sept.	19.25	6.22n	21.31	7.40	4.15	2.12
Oct.	18.29	6.10n	21.94	5.44	3.56	1.88
Nov.	18.76	5.98	23.00	6.38	3.50	1.71

1/ Weighted average price. Weighted geographically by production, seasonally by ginnings. 2/ Prices at New York. 3/ Preliminary.

Compiled as follows:

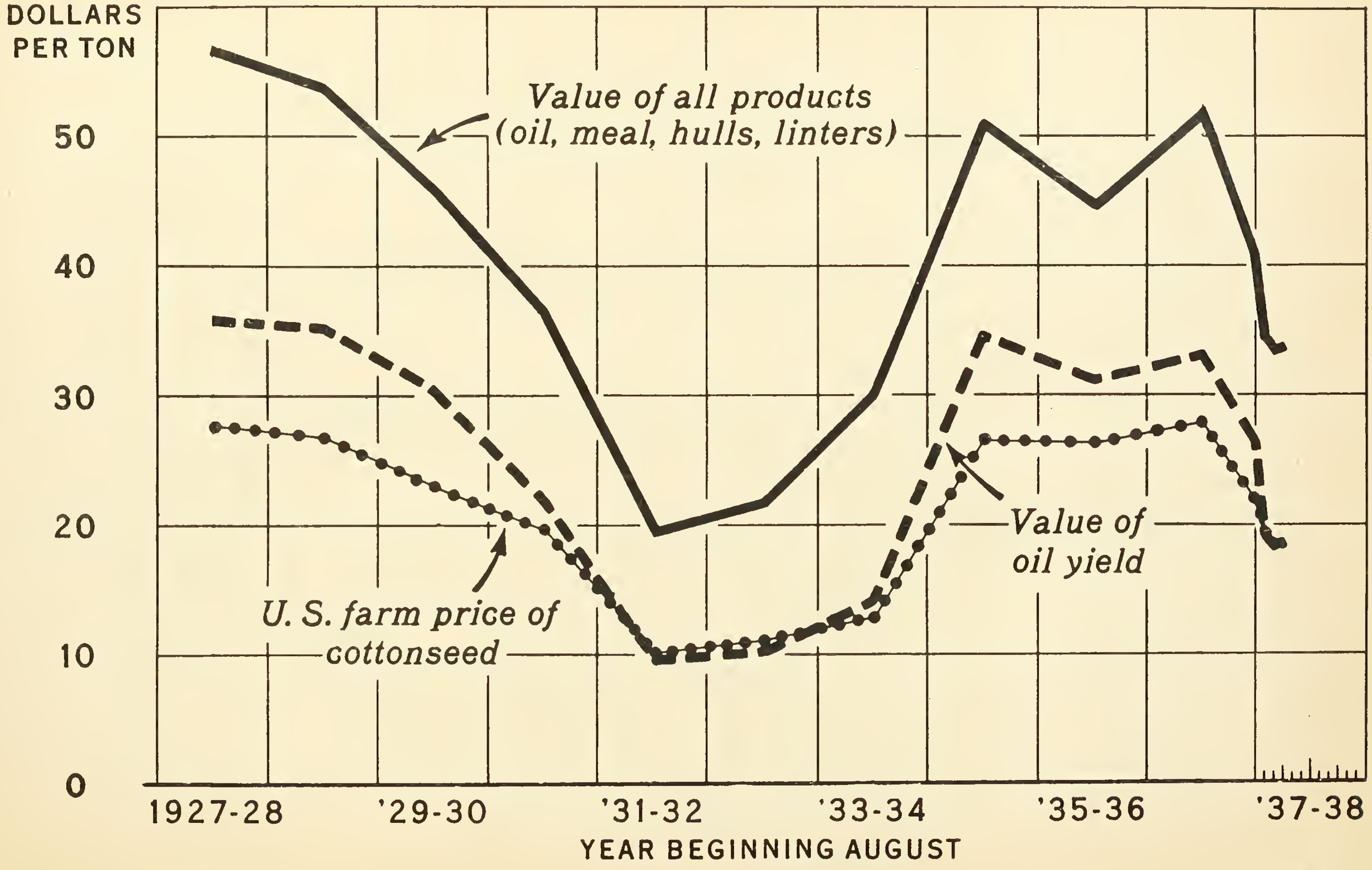
Cottonseed, U.S. farm price based on returns from special price reporters.

Cottonseed oil, crude, f.o.b. Southeastern mills - from the Oil, Paint, and Drug Reporter, except 1932 - June 1933 from the New York Journal of Commerce.

Cottonseed meal, 41% protein, Memphis - from reports made to the Bureau from its representative in the market.

Cottonseed hulls, Atlanta - from the Oil, Paint, and Drug Reporter.

Linters - from Daily Mill Stock Reporter through September 1930; October 1930 to date from reports of the Division of Cotton Marketing.



AVERAGE VALUE OF PRODUCTS FROM A TON OF COTTONSEED. AND OF CRUDE OIL YIELD, AND FARM PRICE OF COTTONSEED

U. S. DEPARTMENT OF AGRICULTURE NEG. 32918 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 1

The oil yield provided a greater return to crushers than any other product in this period, followed in order by meal, linters, and hulls, although the value of hulls per ton of seed was larger than the value of linters in the 1930-31, 1931-32, and 1932-33 crop years, due to greater drop in linter prices in those years. The value of the crude oil yield seems to move fairly closely with the farm price of cottonseed except during periods of falling prices, when the farm price of cottonseed appears to drop more sharply than the value of the crude oil yield. This tendency seems to be operating in the current season. It should be noted that the proportion of the oil yield to total value of all primary products shows a tendency to increase. In the current season the portion of the average monthly value of the products attributable to crude oil has varied from 54.3 percent to 57.2 percent, compared with 53.5 percent in the season 1936-37, 58.9 percent in 1935-36, and an 8-year average, 1927-28 to 1934-35, of 49.9 percent.

It will be noted that the farm price of cottonseed tends to move upward or downward with the value of the products, but at a lower level. The available data are not satisfactory for measuring the absolute spread but are presented as indications of changing spreads.

According to the available data the spread was $20.61 per ton of seed in the 1927-28 season, dropped to a low of $9.96 in 1931-32, rose to $16.03 in the last 4 years, and in the first 4 months of the current season was $14.65 per ton.

Table 7.- Average yield of products from a ton of cottonseed, 1926-36

Year beginning Aug. 1	Average yield of products per short ton of cottonseed				
	Cottonseed oil, crude	Meal and cake	Hulls	Linters	Mill loss
	Pounds	Pounds	Pounds	Pounds	Pounds
Average -					
1926-30	310	902	560	111	116
1931-36	312	907	540	120	121
1927-36	312	905	542	122	119
1926-27	299	901	588	92	120
1927-28	317	900	567	109	107
1928-29	317	902	541	127	113
1929-30	313	890	552	124	121
1930-31	306	918	553	105	118
1931-32	318	901	567	100	114
1932-33	313	906	568	99	114
1933-34	313	909	531	118	129
1934-35	312	910	514	141	123
1935-36	305	911	518	143	123
1936-37	303	903	510	151	133

Compiled as follows:

1926-27 to 1933-34 - Cottonseed Prices in the United States, 1934-35, Agricultural Adjustment Administration, March 1936, table 2.

1934-35 to 1935-36 - Cotton Production and Distribution, Season of 1935-36. Bureau of the Census, Bull. No. 173.

1936-37 - Bureau of Agricultural Economics. Averages computed from table.

Table 8.-Cottonseed oil, crude: Production, trade, stocks, July 31, and apparent disappearance, 1912-13 to 1936-37

Year beginning Aug.	Factory production	Imports 1/	Exports	Reex-ports	Net exports	Stocks at end of period	Apparent disappear-ance
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
1912-13	1,393,125	4,641	313,241	72	308,600	---	---
1913-14	1,449,975	18,378	191,019	101	172,742	---	1,277,233
1914-15	1,719,450	13,970	333,557	30	319,617	---	1,399,833
1915-16	1,253,325	17,352	250,909	0	233,557	219,038	1,019,768
1916-17	1,407,660	12,360	159,849	1	147,490	336,721	1,142,487
1917-18	1,312,470	16,968	109,438	48	92,518	302,391	1,254,282
1918-19	1,325,333	19,170	173,944	211	154,985	185,161	1,287,578
1919-20	1,211,464	22,789	152,760	0	129,971	342,772	923,882
1920-21	1,309,183	877	286,876	39	286,038	264,208	1,101,709
1921-22	930,475	0	87,470	2/	87,470	183,089	924,124
1922-23	1,002,922	46	67,385	---	67,339	153,611	965,061
1923-24	979,617	3/	40,697	---	40,697	118,891	973,640
1924-25	1,403,781	3/	55,556	---	55,556	191,459	1,275,657
1925-26	1,617,015	4/6,679	59,308	---	52,629	164,916	1,590,929
1926-27	1,887,910	3/	61,964	---	61,964	423,407	1,567,455
1927-28	1,476,609	5/ 1	59,568	---	59,567	381,634	1,458,815
1928-29	1,604,131	5/ 2	29,691	---	29,689	383,289	1,572,787
1929-30	1,572,322	3/	32,505	---	32,505	332,205	1,590,901
1930-31	1,441,882	4/ 1	28,119	---	28,118	306,835	1,439,134
1931-32	1,694,123	---	43,453	---	43,453	705,245	1,252,260
1932-33	1,445,681	---	44,296	---	44,296	778,508	1,328,122
1933-34	1,302,786	---	23,031	---	23,031	740,642	1,317,621
1934-35	1,108,582	131,320	5,205	---	5/126,115	506,578	1,468,761
1935-36	1,163,736	141,392	3,768	---	5/137,624	362,066	1,445,872
1936-37 6/	1,364,361	224,059	3,725	---	5/220,334	485,390	1,461,371

1/ General imports, 1913-14 to 1923-24; imports for consumption beginning 1924-25.
2/ Not separately reported after 1921.
3/ Not over 500 pounds.
4/ These are data for calendar years; that is, the second year shown in stub.
5/ Net imports.
6/ Preliminary.

Compiled as follows: Production of crude oil, Bureau of the Census, Cotton Production and Distribution. Production chiefly from domestic seed. Stocks, Bureau of the Census, Cotton Production and Distribution. Stocks are crude plus refined converted to crude (using 0.93). Trade figures, Foreign Commerce and Navigation of the United States; imports are crude and refined not separately reported prior to 1930; reported as "edible" beginning 1930. Beginning January 1936, crude plus refined converted to crude (using 0.93). Exports, 1912-13 to 1921-22, crude and refined not separately reported; 1922-23 to 1936-37, crude plus refined converted to crude (using 0.93). Apparent disappearance computed from table.

Table 9.- Cottonseed oil, crude: Production by months, 1916-17 to 1937-38

Year	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Total
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1916-17	14	103	190	209	171	159	156	142	101	66	36	17	1,408
1917-18	11	64	174	211	177	181	154	139	101	61	26	15	1,312
1918-19	13	31	161	157	166	207	162	130	93	73	39	14	1,325
1919-20	6	70	222	223	192	188	122	97	50	27	11	4	1,212
1920-21	5	43	195	224	176	170	163	149	79	47	33	24	1,309
1921-22	30	92	185	174	131	104	91	73	24	13	7	7	930
1922-23	14	97	181	185	140	144	100	63	39	21	12	9	1,003
1923-24	15	70	196	173	127	120	101	63	46	31	19	7	968
1924-25	10	92	214	225	214	210	158	117	73	44	24	10	1,404
1925-26	34	142	234	235	225	226	192	156	94	46	21	2	1,607
1926-27	21	140	252	290	277	250	205	187	107	62	36	23	1,853
1927-28	46	179	269	252	191	182	144	107	57	24	14	11	1,477
1928-29	21	127	283	272	213	237	166	120	81	40	22	18	1,604
1929-30	35	149	278	244	195	206	163	130	78	46	29	19	1,572
1930-31	49	170	236	233	202	132	124	90	52	28	14	7	1,442
1931-32	17	136	271	271	224	184	171	168	113	68	40	29	1,694
1932-33	46	173	218	209	150	136	137	116	82	73	57	50	1,446
1933-34	72	159	230	152	137	145	136	112	60	33	30	32	1,303
1934-35	60	134	184	165	129	124	108	84	44	33	23	21	1,109
1935-36	43	130	227	191	156	136	107	82	43	24	14	11	1,164
1936-37	30	177	224	203	198	173	130	100	59	34	24	13	1,364
1937-38	52	230	291										

Compiled from Bureau of the Census, Cotton Production and Distribution. Items have been rounded to millions without adjustment to totals.

Table 10.- Cottonseed oil, refined: Production, trade, and disappearance, by months, 1934-35 to 1937-38

Year	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Total
	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb.	Mil.lb
						Production							
1934-35	50.1	79.5	155.0	149.7	132.3	111.9	103.0	97.2	73.4	52.0	37.1	26.1	1,067.3
1935-36	38.2	74.3	104.5	173.0	139.3	127.4	112.4	86.3	67.2	41.2	40.4	29.6	1,091.8
1936-37	20.5	95.2	176.6	182.4	134.2	153.0	142.8	133.5	92.2	55.1	46.2	26.5	10.2
1937-38	28.1	127.3	214.3										
						Imports for consumption							
1934-35	1/	---	2/	3/	4/	5.5	9.4	17.7	6.8	21.6	17.0	17.7	
1935-36	9.0	9.7	8.5	6.7	8.5	11.0	11.3	13.4	10.5	16.3	9.7	7.5	122.1
1936-37	14.5	9.5	3.1	5.7	0.9	9.1	21.4	22.1	16.6	36.2	31.4	15.3	185.8
1937-38	11.5	8.2											
						Exports							
1934-35	0.3	0.4	0.1	0.3	0.2	0.1	0.2	0.3	0.7	0.5	0.2	0.4	3.7
1935-36	0.4	0.3	0.1	0.3	0.1	0.3	0.2	0.3	0.2	0.4	0.2	0.3	3.1
1936-37	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.5	0.4	0.5	0.2	0.2	3.0
1937-38	0.1	0.7											
						Stocks at end of period							
1934-35	540.9	450.6	462.8	437.9	513.1	516.8	530.0	557.6	576.8	540.9	513.4	444.8	
1935-36	342.8	286.3	290.4	343.8	402.2	453.3	459.0	504.3	488.0	460.2	408.9	318.9	
1936-37	238.0	228.5	310.3	386.9	430.4	460.8	532.9	578.8	588.1	567.5	515.2	441.1	
1937-38	342.4	311.9	332.3										
						Apparent disappearance							
1934-35						113.6	99.0	87.0	60.3	109.0	81.4	112.0	
1935-36	142.8	140.2	168.8	126.0	39.3	87.0	87.8	84.1	91.8	84.9	101.2	126.8	1,336.7
1936-37	115.8	114.0	99.6	111.4	141.5	131.5	91.9	109.2	99.1	111.4	129.7	115.7	1,370.8
1937-38	133.0	165.3	(193.9)										

1/ 401 pounds, crude and refined. 2/ 397 pounds, crude and refined. 3/ 3,961,233 pounds, crude and refined. 4/ 5,194,957 pounds, crude and refined.

Computed from Bureau of the Census monthly reports on "Cottonseed Products Manufactured, Shipped Out, and on Hand."

Table 11.- Cottonseed oil: Stocks of crude and refined oil at end of month, 1928-29 to 1937-38

Year and kind	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1928-29												
Crude	15.3	68.9	124.6	141.9	133.7	141.2	126.4	107.1	80.5	50.9	29.7	19.2
Refined	234.5	159.6	223.0	322.6	434.4	511.3	567.5	585.3	579.7	511.7	431.1	338.6
1929-30												
Crude	28.8	77.2	120.5	123.5	115.9	126.6	109.9	103.4	62.0	39.5	22.3	7.9
Refined	230.7	175.4	231.6	326.9	425.5	465.4	520.1	536.1	516.8	464.0	393.6	301.6
1930-31												
Crude	25.6	79.2	111.6	114.8	114.5	127.8	104.7	71.1	43.6	33.1	17.3	8.1
Refined	200.8	174.5	254.8	350.9	429.6	463.1	495.1	493.8	462.8	406.4	349.3	277.8
1931-32												
Crude	12.2	69.5	117.0	144.1	126.6	135.1	130.5	130.0	118.1	85.1	51.2	29.5
Refined	212.4	173.3	231.8	346.8	491.0	556.9	633.7	683.3	705.4	707.4	672.8	628.4
1932-33												
Crude	29.2	103.2	134.9	146.8	143.9	149.0	159.5	161.5	124.0	81.3	63.6	51.3
Refined	525.7	503.4	584.8	670.8	730.5	760.3	802.5	808.2	804.1	781.1	730.4	676.3
1933-34												
Crude	59.1	119.5	146.1	160.1	170.4	188.9	175.3	145.1	109.3	76.3	45.8	34.4
Refined	641.1	623.7	673.2	721.7	769.1	781.0	812.8	841.1	843.2	804.9	733.5	656.8
1934-35												
Crude	38.3	74.5	97.6	162.3	97.5	102.0	103.5	96.7	61.7	47.6	35.0	28.3
Refined	540.9	450.6	462.8	437.9	513.1	516.8	530.0	557.6	576.8	540.9	513.4	444.8
1935-36												
Crude	27.9	73.9	110.6	118.7	132.8	128.9	127.1	114.0	85.7	62.7	37.3	19.2
Refined	342.8	266.3	290.4	343.8	402.2	453.3	489.0	504.3	488.0	460.2	408.9	318.9
1936-37 1/												
Crude	26.6	93.2	121.4	143.2	142.0	146.4	128.2	101.0	68.2	49.1	21.4	11.1
Refined	238.0	228.5	307.4	335.3	418.1	460.4	529.8	579.4	536.6	566.7	517.3	440.9
1937-38 1/												
Crude	31.1	108.1										
Refined	342.4	311.9										

1/ Preliminary.

Compiled from Bureau of the Census, Cotton Production and Distribution.

Table 12.- Cottonseed: Stocks on hand at mills, at close of month, 1916-17 to 1937-38

Year	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
1916-17	71	660	1,239	1,522	1,542	1,176	817	484	229	106	56	32
1917-18	69	357	870	1,171	1,098	875	634	408	204	92	55	40
1918-19	138	644	1,040	1,149	1,138	846	560	307	174	93	38	24
1919-20	31	231	609	783	636	477	354	216	104	47	36	30
1920-21	33	138	489	588	597	487	425	303	192	130	109	100
1921-22	121	391	733	767	620	414	254	101	46	23	20	13
1922-23	61	408	781	875	790	528	305	154	62	24	14	13
1923-24	123	422	740	804	742	578	386	233	130	66	29	22
1924-25	94	390	873	1,191	1,231	901	598	324	144	55	28	32
1925-26	189	779	1,273	1,367	1,416	1,098	744	411	153	57	40	23
1926-27	87	587	1,153	1,392	1,304	1,036	819	562	312	172	103	90
1927-28	205	652	1,054	1,118	1,013	761	483	256	108	50	30	22
1928-29	123	568	1,193	1,340	1,334	999	648	388	191	101	65	42
1929-30	161	589	1,178	1,163	1,108	758	526	330	197	119	77	45
1930-31	216	700	1,087	1,083	991	619	379	210	97	46	33	25
1931-32	61	483	1,201	1,584	1,410	1,190	922	710	528	400	352	300
1932-33	266	667	1,218	1,443	1,336	1,209	970	749	594	448	318	221
1933-34	222	592	1,076	1,354	1,298	1,022	741	504	374	320	281	223
1934-35	299	819	1,232	1,238	1,131	857	580	359	249	169	125	90
1935-36	148	469	839	888	857	635	372	199	98	52	36	22
1936-37 1/	172	835	1,302	1,392	1,263	881	573	311	157	85	46	42
1937-38 1/	241	989										

1/ Preliminary.

Compiled from Bureau of the Census, Cotton Production and Distribution.

Table 13.- Cottonseed: Weighted average spot price per ton received by producers, United States, 1932-33 to 1937-38

Year	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	July 15	Weighted average
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
1932-33	9.13	11.28	10.45	9.54	8.87	8.81	8.91	9.22	10.03	12.00	12.96	16.59	10.35
1933-34	15.60	12.11	12.58	13.67	15.35	16.18	18.90	20.84	21.38	22.23	21.59	22.18	14.21
1934-35	25.46	31.54	35.62	37.08	39.90	40.27	40.81	40.08	39.47	39.36	37.16	34.53	34.79
1935-36	29.22	27.65	32.00	33.27	32.95	31.72	31.08	30.95	31.23	30.67	29.01	30.42	31.19
1936-37	31.66	33.15	33.23	33.23	34.37	36.82	37.70	38.13	38.81	38.52	36.81	34.53	33.27
1937-38	26.59	19.25	18.29	18.76									

Table 14.- Cottonseed oil, p.s.y.: Average spot price per pound in tanks, New York, 1932-33 to 1937-38

Year	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Average
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
1932-33	4.51	4.48	3.97	3.75	3.48	3.62	3.53	3.77	4.08	4.99	5.48	6.17	4.32
1933-34	5.16	4.61	4.19	4.50	4.30	4.70	5.10	5.10	5.20	5.00	5.30	5.90	4.92
1934-35	6.80	7.50	[illegible].10	9.20	10.10	10.86	11.36	10.83	10.26	10.50	10.10	9.60	9.60
1935-36	9.90	10.20	10.40	10.30	10.70	10.10	9.70	9.40	9.40	8.80	9.10	9.80	9.82
1936-37	10.10	10.20	9.90	10.00	11.00	11.40	11.00	11.10	10.60	10.50	10.00	9.20	10.42
1937-38	8.00	7.40	6.70										

Table 15.- Cottonseed oil, crude: Average price per pound in tanks, f.o.b. Southeast mills, 1932-33 to 1937-38

1932-33	3.71	3.71	3.25	3.00	2.72	2.90	2.74	2.88	3.18	4.16	4.38	5.45	3.51
1933-34	4.48	3.57	3.23	3.58	3.43	3.56	4.18	4.44	4.40	4.23	4.68	5.10	4.07
1934-35	5.65	6.55	7.20	7.91	8.94	9.58	10.03	9.82	9.31	9.33	8.97	8.45	8.48
1935-36	8.72	8.74	9.17	9.16	9.36	8.91	8.45	8.30	8.36	7.62	8.08	8.67	8.63
1936-37	8.86	8.86	8.62	8.70	9.95	10.36	9.89	9.94	9.50n	8.91	8.25n	8.00n	9.15
1937-38	7.05n	6.22n	6.10n	5.98									

Compiled as follows: Cottonseed from Bureau of Agricultural Economics.

Cottonseed oil, prime summer yellow, from Bureau of Labor Statistics Wholesale Price Bulletins.

Cottonseed oil, crude, from Oil, Paint, and Drug Reporter, average of quotations for Saturdays during the month, except August 1932 to July 1934, which are average of daily quotations.

OLEOMARGARINE

Domestic production of oleomargarine was 6 million pounds higher in October 1937 than in the previous month, and 5 million pounds above production in October 1936. Total production for the first 10 months of 1937, however, is just slightly under production for the corresponding months of 1936.

Relative quantities of materials used are continuing the trend reported for the past several months, animal fats remaining comparatively stationary and cottonseed oil more and more replacing coconut oil.

The average price of 92 score butter in New York for the month of November, 1937, was 38.1 cents per pound, compared with 33.6 cents per pound in November, 1936. The price of Danish butter in London for the week ending November 25, 1937 (converted at current rates of exchange) was 32 cents per pound, compared with 26 cents per pound in the corresponding week a year earlier. Oleomargarine in Chicago made from domestic vegetable oils was priced at 15 cents per pound in November 1937, compared with 15.5 cents per pound a year earlier. It is possible that butter prices are stimulating oleomargarine consumption in foreign countries.

Table 16.- Oleomargarine: Production and materials used in manufacture, United States, September and October, 1936 and 1937

Item	1936 1/		1937 1/	
	Sept.	Oct.	Sept.	Oct.
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
Oleo oil	1,435	1,741	764	773
Oleostearine	312	294	364	300
Lard, neutral	171	202	112	120
Oleo stock	151	174	94	100
Total animal	2,069	2,411	1,334	1,293
Cottonseed oil	9,080	10,042	13,282	20,154
Soybean oil	777	1,559	3,854	2,990
Peanut oil	391	390	215	255
Corn oil	17	6	142	75
Total domestic vegetable	10,265	11,997	17,493	23,474
Coconut oil	13,964	13,619	9,054	6,964
Babassu oil	1,167	572	157	992
Palm-kernel oil	148	625	532	231
Palm oil	137	29	-	-
Ouricuri oil	36	201	-	-
Sesame oil	3	6	-	-
Total foreign vegetable	15,455	15,052	9,743	8,187
Total fats and oils	27,789	29,460	28,570	32,954
Milk	6,357	6,732	6,411	7,497
Salt and other miscellaneous	1,797	1,935	1,662	2,098
Production of oleomargarine	33,711	35,586	34,843	40,645

1/ Preliminary.

Compiled and computed from reports of the Commissioner of Internal Revenue.